California local governments have long been innovators when it comes to energy. Yet never before have they had the opportunities they have today. Recent price spikes, deregulation, and global climate change, all suggest that local governments play a larger role in managing energy supply and demand.

A revolution is now occurring in the power business that mimics computers and telecommunications.

Emerging renewable resources – solar photovoltaics, small wind turbines, fuel cells and solar thermal electric systems – are soon to become the counterpart to cell phones and lap top computers.

These energy sources are commonly referred to as "distributed generation" because the sources are distributed throughout a region. They can be connected to the grid, operate as distinct stand-alone systems, or be part of new micro-grid systems offering premium power quality.

The California Energy Commission's Emerging Renewable Buy-Down Program offers rebates that can reduce the investment costs of these exciting, new distributed generation technologies by up to 50 percent. Local governments concerned about their own electricity costs, reliability, and the environmental impacts of electricity generation, should apply now.

Resources



Find out if you are eligible for state financial incentives that can cover up to 50 percent of initial investment costs of solar photovoltaics,

small wind turbines, fuel cells and solar thermal systems.

www.energy.ca.gov/greengrid

Helpful Documents From the Energy Commission

- 1. Distributed Generation:

 CEQA Review and Permit Streamlining

 December 2000/P700-00-019
- Supplemental Recommendation Regarding Distributed Generation Interconnection Rules October 2000/P700-00-014
- For these, and other useful documents, see: www.energy.ca.gov/distgen

What Are Other Local Governments Doing?

The Local Government Commission has been involved with progressive energy policies for over two decades.

Check out their energy library: www.lgc.org

Check Out What The Federal Government Offers

The U.S. Department of Energy is a good source of information on current news, policies, regulations and barriers to clean distributed generation.

www.eren.doe.gov/distributedpower/



CALIFORNIA ENERGY COMMISSION 1516 9th Street, Mail Station-45 Sacramento, CA 95814-5512 Emerging Renewable Technologies



Empowering Local Governments

SOLAR PHOTOVOLTAICS

Solar photovoltaics rely upon silicon semi-conductors to convert sunlight directly into electricity.

SMALL WIND TURBINES

Small wind turbines convert the kinetic energy of wind into electricty.



FUEL CELLS

Fuel cells rely upon a chemical reaction to generate electricity and heat. Fuel sources include digester gas, hydrogen, biogas and landfill gas.





Solar thermal technologies include parabolic troughs and dish stirling systems. Both use the sun's heat to generate electricity.

How To Plug Into Buy-Down Rebates

There are several things to consider before applying for the California Energy Commission's Emerging Renewable Buy-Down rebate.

Funding for the California Energy
Commission's Buy-Down Program is collected
from ratepayers of these investor-owned
utilities: Pacific Gas & Electric, Southern
California Edison, San Diego Gas &
Electric and Bear Valley Electric. Only
those local governments operating within
the service territories of these utilities and
being served as retail customers are eligible
for buy-down rebates.

Local governments served by their own municipal utilities are not eligible for the Energy Commission buy-down rebates.

However several municipal utilities, including those serving the cities of Los Angeles, Sacramento, Santa Clara

and Palo Alto, have their own programs to reduce the costs of solar photovoltaic (PV) systems.

The four renewable energy technologies eligible for the buy-down – solar PV, small wind turbines, fuel cells (powered by non-fossil fuels), and solar thermal electric systems – must be connected to the grid. Before applying for a rebate, consider whether there is enough sun, wind or alternative fuel available to justify investing in one of these renewable energy systems.

You may want to call one of the retailers listed at the website below. They should be able to help measure renewable resources and give you technical tips regarding the mechanics of installation. A list of certified products, retailers selling equipment, and financing companies are all available from the California Energy Commission.

If interested in applying, please call 1-800-555-7794 or visit www.energy.ca.gov/greengrid

Benefits To Local Governments



- Stabilize long-term prices and reduce future fossil fuel price risks for municipal facilities
- Reduce local, regional and global air emissions
- Demonstrate the reliability of renewable generation
- Guide and attract economic development

- Set an example of Environmental Stewardship
- Ensure reliability for constituents
- Protect constituents from high electricity prices
- Provide disaster relief support